

Federal Acquisition Service





The current phase of the government-wide wireless program is part of the broader FSSI initiative

OVERALL WIRELESS STRATEGY

PHASE	EFFORT	STATUS
1a	Support and track agency efforts to generate immediate savings through inventory and account cleanup efforts with the major wireless carriers	COMPLETED
1b	Establish a strategic source of supply for acquiring Wireless Telecommunications Expense Management (TEM) services from TEM providers to help agencies lower their total costs through better management of their wireless services and inventory assets	COMPLETED
2	Investigate ways to help agencies leveraging their collective buying power to negotiate better rate plans, prices, and contract terms with the wireless carriers	CURRENT TEAM FOCUS

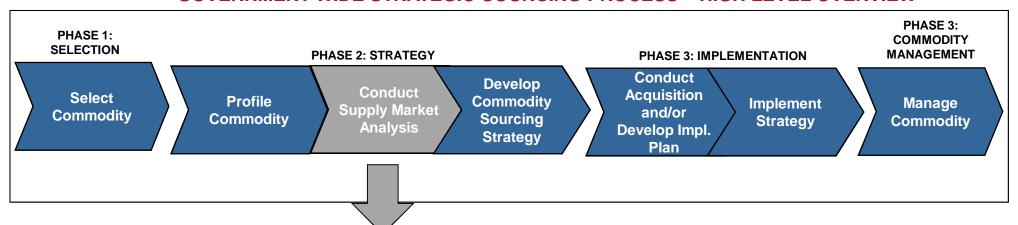
CURRENT PHASE

- <u>Background:</u> The initial FSSI wireless commodity team was focused on understanding participating agencies' spend profiles and the current wireless operating environment. The commodity team identified the need for a Wireless Telecommunications Expense Management (TEM) Services offering as the first step in the process. An Opportunity Analysis conducted in May 2009, identified strong agency interest in Wireless Devices and Services as a logical follow-on initiative to complement the existing TEM Services vehicle.
- <u>Approach:</u> FSSI has established a commodity team and is using the Strategic Sourcing process to develop a Commodity Strategy for the acquisition and management of wireless services and devices across the government. As an initial step, a Supply Market analysis will profile industry reports, carriers' annual reports and market trends to identify potential opportunities for savings and other improvements.



This report presents how market dynamics influence strategic sourcing opportunities for wireless devices and services

GOVERNMENT-WIDE STRATEGIC SOURCING PROCESS – HIGH LEVEL OVERVIEW



FSSI WIRELESS COMMODITY TEAM SCOPE

- Commercial Wireless Services (voice & data)
- Commercial Wireless Devices (e.g. cell phones, smart phones, Blackberries, & aircards)

SCOPE OF THIS DOCUMENT

- Identifies key facts, trends, and conditions in the Wireless Devices market that may be leveraged in the FSSI Strategic Sourcing Initiative for Wireless Rate Plans and Devices
- Serves as a supply market-focused fact base for identifying sourcing opportunities for Wireless Services which will be explored further in the subsequent steps of the Strategic Sourcing process



The competitive dynamics of the supply market provide the government opportunity to improve wireless management through enterprise contracts and adoption of best practices

Leverage the government's position in the competitive wireless marketplace



The wireless market is competitive due to high saturation and low churn rates. FSSI, an enterprise user base that heavily uses high revenue data services, has the opportunity to drive lower rate plan pricing with incumbent and other vendors.

Leverage nationwide and regional providers' capabilities



While nationwide carriers provide a national footprint, there are gaps in the coverage areas and service consistencies. Government agencies require the services of both nationwide and regional providers to fulfill overall requirements.

Implement contract management best practices



Government agencies are managing a large number of redundant contracts with carriers which limits the value that the government can realize from its contracts. Opportunities exist to implement industry best practices in contract management to help reduce costs and enhance operational efficiency.

These potential opportunities will be validated by the commodity team through the Commodity Profile and strategy development activities



- Leverage the government's position in the competitive wireless marketplace
- Leverage nationwide and regional providers' capabilities
- Implement contract management best practices to reduce cost and improve efficiencies
- Appendix
 - Supplier Snapshots



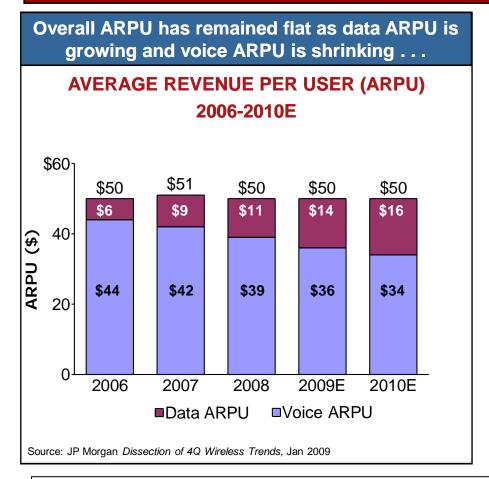
Leverage the government's position in the competitive wireless marketplace

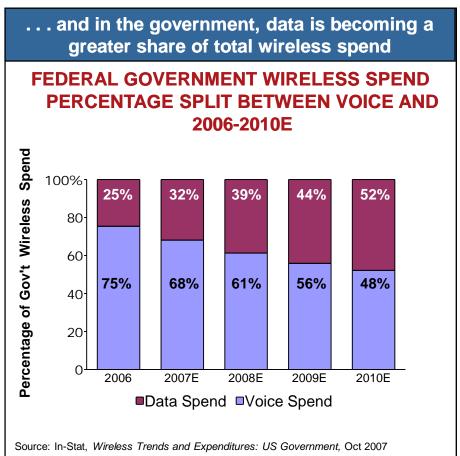
MARKET DYNAMICS - FINDINGS AND OPPORTUNITIES

#	Key Finding	Details	Sourcing Implications
1	Wireless carriers prefer customers that will purchase data plans to offset decreasing voice revenue	 Voice average revenue per user (ARPU) has been steadily declining while data ARPU has been increasing Government agencies are increasingly becoming heavy data plan users and are attractive customers for carriers 	Carriers may be willing to offer price discounts on wireless services as the government's bargaining power is stronger with a high demand for services
2	The "pool" of new cellular customers is shrinking, causing wireless providers to shift their focus to provide incentives to customers who switch to their networks	 Overall year to year revenue growth rates of the industry are declining The US wireless market has passed 85% penetration The wireless market has had a consistently low churn rate 	Wireless providers may be willing to offer better negotiating terms to encourage customers to join their network
3	Industry economics require carriers to retain a high number of their existing user base in order to continuously improve services and coverage	 There are higher costs associated with adding new customers compared to retention of current customers Wireless providers look to the stable revenue source that existing enterprise customers bring to fund CAPEX 	Carriers may negotiate aggressively in order to maintain existing customers and win enterprise contracts that provide steady revenue flows



Wireless carriers prefer customers that are heavy data plan users to offset the decreasing voice average revenue per user (ARPU)

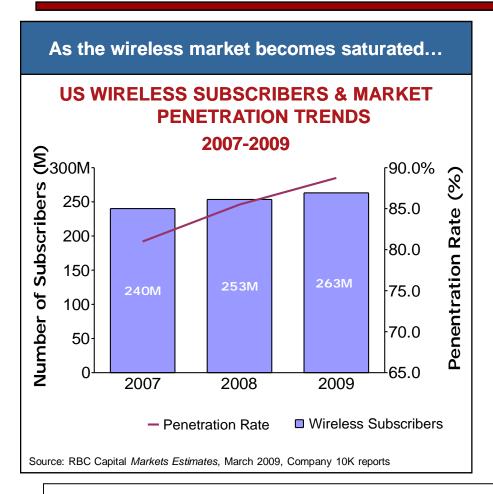


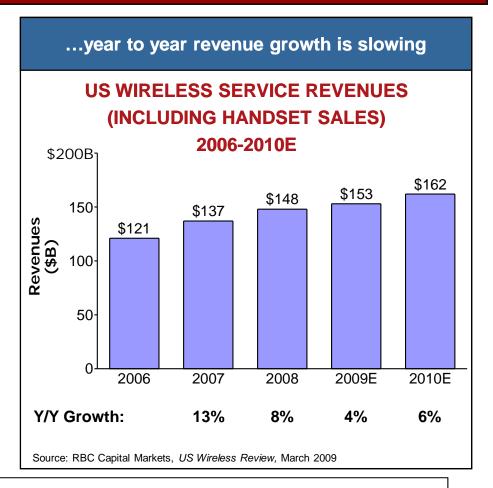


Government agencies, as high ARPU data service users, are attractive customers for wireless carriers



Flattening revenue growth rates and a well-penetrated market in the US wireless industry promote competition among providers

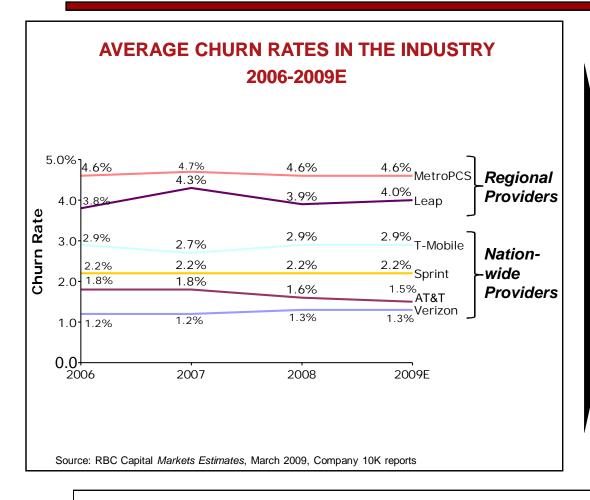




In a deeply penetrated market carriers heavily focus on obtaining their competitors' customers for growth, increasing the importance of retention of existing customers



The US wireless market has a consistently low churn rate, creating steep competition around getting customers to switch networks



KEY FACTS & INSIGHTS

- Churn is the measure of the number of subscribers moving in and out of a given wireless provider
- Nationwide carriers have lower churn rates than regional players
- Nationwide vendors usually service postpaid customers who are required to sign one to two year contracts that have early termination fees restricting customers movement between wireless providers
- Most regional carriers provide service to prepaid customers who do not have to sign a contract and are more likely to switch vendors
- Verizon Wireless has had the lowest churn rate among the nation's wireless carriers

In such a competitive market, wireless providers may be willing to provide better contracting terms to obtain competitors' customers



Wireless carrier operating cost economics are summarized by two fundamental industry metrics

OPERATING COST METRIC

CPGA – Cost per Gross Addition: Cost associated with acquiring <u>new</u> customers, expressed on a per subscriber basis



DESCRIPTION

- Represents the marketing and advertising costs associated with acquiring new customers.
- Also includes equipment subsidies offered to new customers that sign up for fixed period service plans.
- Costs to open company-owned stores are part of this metric.

CCPU – Cash Cost per User: Ongoing average monthly cash cost associated with serving <u>existing</u> customers

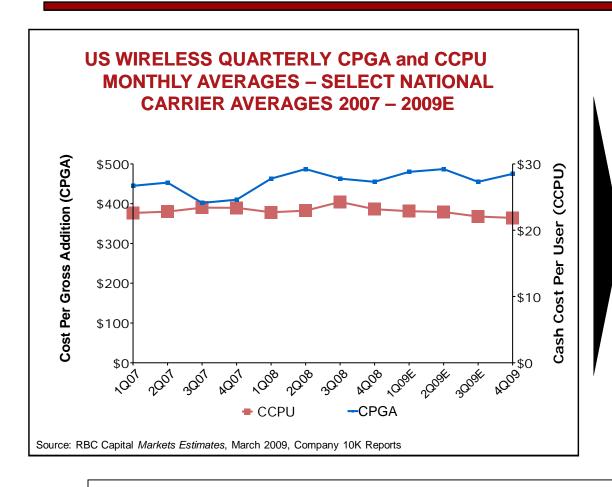


- Retention activity is a key cost element handset upgrade subsidies are a major cost driver of retention costs.
- Ongoing customer care and support for existing subscribers.
- LNP (local number portability) implementation has also been a factor in recent months, including dedicated LNP centers, and hiring and training of staff.

CPGA and CCPU are more meaningful when considered in conjunction with ARPU and churn rate; everything else equal, wireless carriers will generally spend more in marketing dollars to attract a higher ARPU user as opposed to a lower ARPU user



With high costs to add new customers, carriers are likely to make concessions for an existing enterprise user base that represents high ARPU



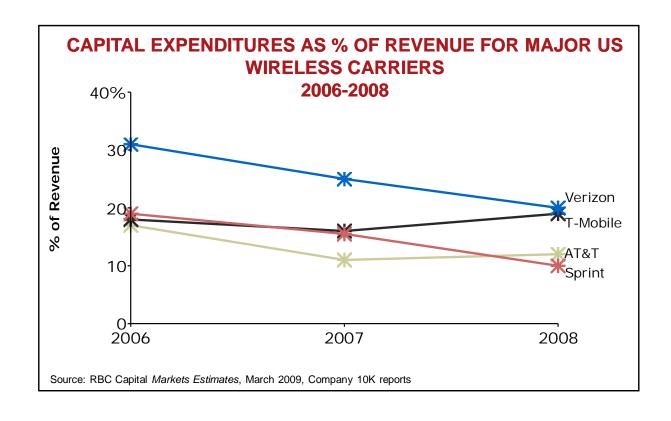
KEY FACTS & INSIGHTS

- Cost of acquiring wireless customers (CPGA) across the industry is increasing as switching costs have decreased due to prepaid non contract options
- All major carriers show evidence of offering deep discounts to large volume customers; with Carriers offering bargains on smart-phones to drive revenue through increased use of data services
- The cost of serving existing customers (CCPU) has remained fairly stable as carriers have established a reliable and upgraded network infrastructure.
 Churn rates have also been fairly low and stable

Buyers may find that their existing wireless carriers can be motivated to negotiate as much, if not more, than carriers who are trying to win a new account



The carrier's continued high CAPEX, as percent of revenue, highlights the importance of long-term predictable enterprise contracts



KEY FACTS & INSIGHTS

- CAPEX, as percent of revenue, while declining stayed relatively high (average 15 – 20%)
- CAPEX is a critical strategic means by which the carriers use to fuel their future capabilities and growth
- CAPEX has declined some as 3G rollout nears completion but still remains higher than many other service industries
- 4G rollout and continued coverage expansion is expected to drive CAPEX needs going forward

Government agencies can leverage themselves as a revenue source to help fund CAPEX



- Leverage the government's position in the competitive wireless marketplace
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Take advantage of both the top nationwide providers' and regional providers' capabilities to fulfill overall requirements

CARRIER CAPABILITIES - FINDINGS AND OPPORTUNITIES

#	Key Finding	Details	Sourcing Implications
1	U.S. wireless market can be divided into three major segments	 The need for large investments in infrastructure limits the number of players who can compete nationally The national service providers are the primary segment used by large enterprise customers Regional players provide regional services Resellers provide service to niche markets that do not align with government's needs 	Selection of strategic suppliers in this market area should be focused on the nationwide and the regional carriers
2	The government needs multiple carriers to fulfill its coverage requirements	 Even with Verizon Wireless, AT&T, Sprint and T-Mobile holding 90% market share, there are coverage gaps Carriers operate on two separate networks (IDEN and CDMA) and have different coverage mapping 	 Users with rural coverage needs will be impacted the most by supplier selection decisions Sprint & T-mobile are likely to be used more for niche requirements or to tactically drive increased competition
3	The government needs a variety of nationwide and regional carriers to ensure service consistency requirements are fulfilled	No single nationwide provider can fulfill the governments call quality and data performance requirements across all regions	The government may need to have contract agreements with the four top carriers along with select regional carriers to fulfill requirements



U.S. wireless market can be divided into three major segments

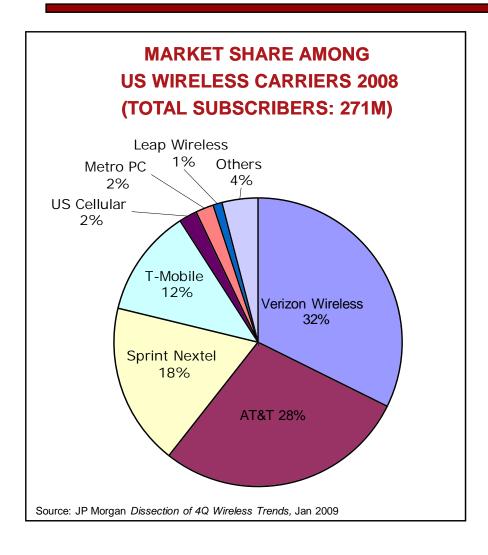
WIRELESS TELECOMMUNICATION SERVICES SUPPLY MARKET SEGMENTATION

Findings	National Service Provider	Regional Providers	Resellers/MVNOs*
Key Providers	 Verizon Wireless AT&T Wireless Sprint Nextel T-Mobile USA 	 Leap Wireless Metro PCS US Cellular Alaska Wireless Appalachian Wireless Cincinnati Bell Wireless Corr Wireless Nex-Tech Wireless West Central Wireless 100+ other regional providers 	 TracFone Wireless Virgin Mobile USA Kajeet Disney Mobile Others (ESPN, Jitterbug Speak Out Wireless, Embarq, Helio etc.)
Service Footprint	National service delivery footprint	Regional service delivery footprint	Players partner with national players for network
Service Offering	 Postpaid service is the dominant offering Prepaid service offering is growing 	Many focus heavily on prepaid service offering	Prepaid servicesExclusive content providers
Typical Customers	Primary segment used by enterprise customers	Budget-minded or prepaid customers; infrequent travelers	Niche markets (e.g. elderly, low income, urban youths)

^{*} MVNO: Mobile Virtual Network Operators



Verizon Wireless, AT&T, Sprint and T-Mobile hold 90% market share

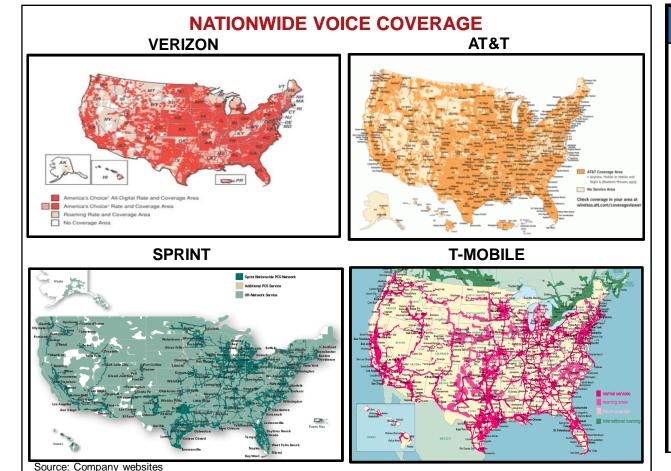


KEY FACTS & INSIGHTS

- The large investments in technology and infrastructure that is required to compete in this market limits the number of carriers competing for enterprise customers with nationwide service needs
- Four national players account for nearly 90% of the US wireless subscriber share:
 - 1. Verizon Wireless
 - 2. AT&T Wireless
 - 3. Sprint Nextel
 - 4. T-Mobile USA
- Three main regional players account for 5% of the US wireless subscriber share:
 - 1. US Cellular
 - 2. Metro PCS
 - 3. Leap Wireless
- "Others" include other smaller regional players and resellers/ MVNOs



While the nationwide carriers each provide voice coverage across most of the US, there are significant coverage gaps that other providers may better fulfill



KEY FACTS & INSIGHTS

- Verizon Wireless is the largest wireless carrier that offers coverage in all 50 states while the strength of coverage depends on user's location
- AT&T Wireless is the second largest wireless carrier behind Verizon that offers coverage in all 50 states while the strength of coverage depends on user's location
- Sprint Nextel has a smaller coverage than AT&T and Verizon Wireless and operates on two separate networks (CDMA and iDEN) which have separate coverage maps
- T-Mobile operates on a smaller network but has roaming agreements with AT&T and other smaller operators

No one nationwide carrier can fulfill the government agencies' coverage needs and, as such, contracts may be needed with the four top carriers along with select regional carriers



Regional players offer a low cost option to filling coverage gaps of the large providers



KEY FACTS & INSIGHTS

- Regional vendors specialize in select markets and in areas that nationwide carriers fail to cover
- Most compete on price and special offerings such as unlimited voice plans and prepaid plans without contract requirements
- Regional players have varied data plans offerings
- Regional players drive competition by providing alternative services and offering lower costs
- Regional players rely on roaming contracts in order to provide nationwide service

Regional players generally have comparatively low operating costs and can compete at lower price points, creating greater competition in their region



Resellers have positioned themselves in the market to provide unique services to niche markets that do not align with the government's needs

OVERVIEW OF KEY RESELLER WIRELESS PROVIDERS

Niche Provider	Target Market	Notes
Tracfone	Low income	Government subsidized program to provide cell phone service to people with low income
Virgin Mobile	Young urban audience and budget minded consumers	Wholly owned by Sprint Nextel to provide prepaid options and pay by minute or day
Kajeet	Families	Especially tailored for families to control their children's phone access and usage
Disney Mobile, EPSN	Current customer base	Incentives include exclusive content and extended service offerings from their company
Jitterbug	Elderly	First mobile provider that is geared primarily toward senior citizens by making all service offerings easy to use

KEY FACTS & INSIGHTS

- With high cellular market penetration the major nationwide carriers are beginning to provide comparable services to niche customer bases
- Resellers have shown strong growth, doubling their market share in the last 5 years
- Approximately 9% of all cellular mobile telephone subscribers are with a reseller

Source: CNet Reviews, Http://reviews.cnet.com

Resellers are not targeting government customers and do not fulfill government needs and requirements



Call quality profiles vary significantly across regions among the key providers

2009 WIRELESS CALL QUALITY PERFORMANCE*

Region	AT&T	Verizon	Sprint Nextel	T-Mobile	US Cellular
Northeast			\bigcirc		N/A
Mid-Atlantic	•		\bigcirc		N/A
Southeast	\bigcirc		•	•	N/A
North Central	\bigcirc		\bigcirc		
Southwest			\bigcirc	•	N/A
West		•	•		N/A
Above average		① Aver	rage	O Below	average

KEY FACTS & INSIGHTS

- The top 4 nationwide providers have varying call quality profiles across regions, with each performing best in different areas
- Verizon outperformed its nationwide competitors in call quality performance test
- In certain areas, regional players outperform nationwide carriers, as demonstrated by the available data on US Cellular in North Central US

Source: JP Power and Associates 2009 Wireless Traditional Mobile Phone Satisfaction Study, April 2009

^{*} Call quality performance is based on seven problem areas that impact overall carrier performance: dropped calls, static interference, failed connection, voice distortion, echoes, no immediate voicemail notification, and no immediate text message notification



Each provider also demonstrates strengths in different areas of data performance, requiring users to strongly consider what features they require most

DATA PERFORMANCE RESULTS*

Carrier	Download Speed (kb/sec)	Upload Speed (kb/sec)	Reliability
Verizon	951	426	89.8%
AT&T	812	660	68%
Sprint	808	377	90.5%

Source: PC World A Day with 3G: How do AT&T, Verizon and Sprint compare? Tested by Novarum.

KEY FACTS & INSIGHTS

- The top 3 nationwide providers have varying data performance levels
- No single provider dominates in overall data performance
- Verizon showed good speed and reliability
- Sprint demonstrated solid reliability
- AT&T had fast uploading speeds but limited reliability

The government needs a variety of nationwide and regional carriers to provide the best data service quality

^{*} Data performance tests were administered in 20 locations in 13 cities. Reliability is measured as the percentage of 1-minute performance tests in which the service was available, uninterrupted and faster than dial-up speeds

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Implement contract management best practices on enterprise contracts to reduce total cost of ownership and improve efficiencies

ENTERPRISE CONTRACT BEST PRACTICES - FINDINGS AND OPPORTUNITIES

#	Key Finding	Details	Sourcing Implications
1	Government agencies are using many contracting methods to obtain wireless services while few have established agency-wide enterprise agreements	 Government buyers have a very large selection of contracting options to consider when procuring services, without any clear ability to understand differences in value proposition Agencies that have not established enterprise contracts often are managing large number of contracts with carriers limiting the value that the government can realize from its contracts 	Reducing the number of contracts with carriers reduces cost and improves efficiencies by reducing the amount of contract management overhead
2	Opportunities exist to implement industry best practices in contract management to help reduce cost and enhance operational efficiency	 Best practices include: Establishing a single, master agreement per supplier Reducing the number of carriers Standardizing configuration and models Standardizing and limiting available wireless plans Establishing policy and compliance 	Leverage volume and take advantage of price breaks while limiting number of choices for devices and plans



Government agencies are using many contracting methods to obtain wireless services while few have established enterprise agreements

GSA Schedule

- Schedule 70, Section 132-53 "Wireless Services"
- 43 Individual carriers available

Agency Established BPAs & Pricing Agreements

- Examples:
 - BPAs
 - ID/IQ Contracts
- Can be established by any government contracting activity

"Open Market" – Subscriber Line Agreements

- Direct web ordering
- Retail outlets
- Contracts overriding GSA schedule or agency-established agreements

TEM Service Provider as "Reseller"(1)

 Wireless service from major carriers re-sold by TEM service provider as a requirement of the TEM contract

KEY FACTS & INSIGHTS

- An almost infinite number of contracts are available to a government buyer
- Agencies establish contracts either based on local or organization-wide requirements
- Many organizations purchase directly from a GSA schedule
- Purchase cards have made it easier for authorized users to order directly from the open market
- Price of wireless service is typically well within the purchase card authorization level



 The total number of contracts or agreements used by FSSI agencies is unknown

(1)TEM provider can also be used only as the value-added service provider in conjunction with the other approaches for acquiring wireless service



Agencies that have not established enterprise contracts are often managing a large number of contracts with carriers

NUMBER OF UNIQUE CONTRACTS

Carriers Agency	AT&T	Verizon	Sprint Nextel	Total
Agency 1	108	222	357	687
Agency 2	62	97	76	235
Agency 3	28	75	37	140
Agency 4	143	383	432	958
Agency 5	69	173	34	276

Source: FPDS FY2008 Spend Analysis

KEY FACTS & INSIGHTS

- Agencies have many contracting actions with the same carriers
- These contracts could have a multitude of rate plans for single carriers resulting in different rates for the same services
- Few agencies have established enterprise agreements to acquire their wireless devices and services (e.g. Networx)
- Many agencies are using multiple local agreements

Few agencies have established enterprise agreements while others are using multiple local agreements



Large number of wireless contracts limit the value that the government can realize from its contracts

COMPLICATIONS WITH MAINTAINING LARGE NUMBER OF WIRELESS SERVICE CONTRACTS

Lack of Visibility

- Spend is disaggregated across multiple contracts reducing ability to secure volume discounts
- Inaccurate picture of what the agency's wireless spend looks like
- Manual searches across contracts are needed to determine whether a company has multiple contracts with the same vendor
- Administrative costs of multiple contracts

Inability to Ensure Compliance

- Agencies cannot achieve the full benefit of negotiated contracts if it does not enforce the terms and commitments
- Having multitude of contracts makes it very difficult to ensure compliance

Invoice Inconsistencies

- Accounting departments find it difficult to match invoices to contractual terms, pricing, and conditions to determine whether invoices reflect the correct amount
- Companies are unable to isolate maverick spending by matching contracted services to paid services

Unnecessary Contract Renewals

- Often organizations automatically renew contracts even if they no longer use the product or service
- Tracking numerous contracts as to when they are up for renewal becomes cumbersome and leads to excess cost

Reducing the number of contracts with carriers reduces cost and improves efficiencies by reducing the amount of contract management overhead for both agencies and wireless carriers



Opportunities exist to implement industry best practices in contract management to help reduce cost and enhance operational efficiency

WIRELESS CONTRACT BEST PRACTICES

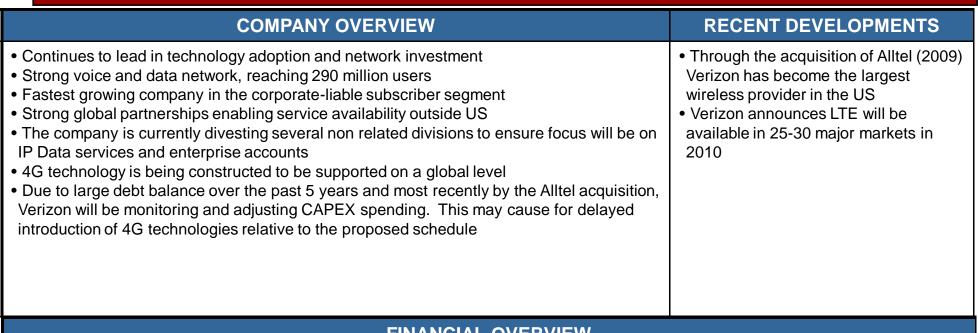
	FEATURES	BEST PRACTICES
Establish a single, master agreement per supplier		 Leverage volume for price breaks Ensure consistency in pricing and terms Require monthly, quarterly or bi-annual supplier audit of charges or have a third party contract for audit/recovery services Eliminate subscriber line agreements
•	Reduce the number of carriers	Identify and eliminate redundant services Take advantage of price breaks
•	Standardize configuration and models	Standardize to a limited number of choices that are proven and reliable technologies
•	Standardize wireless plans	Standardize to a limited number of plans by user types
•	Establish policy and compliance	 Provide adequate guidance to users regarding providers and plans Enforce uniform procurement policy with appropriate compliance management systems and processes
•	Develop contract terms	 Include refresh technology Refresh plans every 6 months Eliminate activation and termination fees Acquire free cell phones Frequent vendor check for abandoned lines

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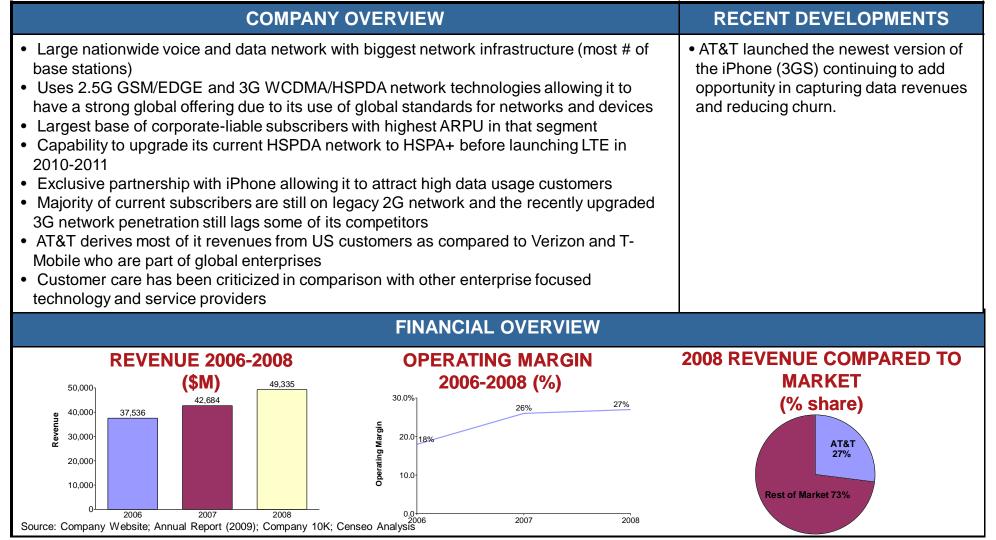
Verizon is the wireless service leader with strong experience in supporting enterprise customers







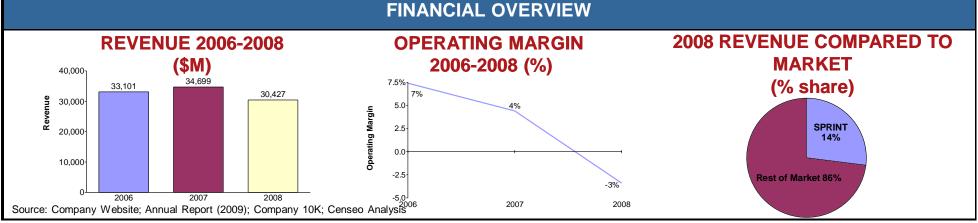
AT&T provides a stable nationwide network with extensive coverage throughout the CONUS including many rural regions





Sprint Nextel is the leader in Push-to-Talk and has the first working 4G network

COMPANY OVERVIEW	RECENT DEVELOPMENTS
 Strong spectral position with the ability to deploy 4G services. Existing CDMA network continues to provide a robust network coverage High percentage of data card users contribute to a high data ARPU Large portfolio of handsets Leader in Push-to-talk service Supporting multiple network technologies (CDMA, iDEN for 3G and WIMAX for 4G) is costly and difficult to manage; increases variability in quality and costs of services offered Increasing churn rate and decreasing gross subscription adds have resulting in rapidly decreasing market share WIMAX does not have the same level of backing as LTE in US or worldwide and hence Sprint runs the risk of slower rollouts and lack of products 	 Sprint Nextel recently has shed 8,000 jobs saving the company \$1.2 billion Sprint is launching the Palm Pre, a smart phone competitor to the iPhone which they hope will help them retain customers





T-Mobile is aggressively seeking new subscribers in the US market

